Hacked Devices, A New Game Experience, and a Wi-Fi Detector Shirt

EDITORS’ INTRO
In this issue, we cover several hacks for devices, new and old, and a few things we believe will appeal to the hacker tradition. Please continue to send pointers to upcoming products with exciting possibilities, your feedback on existing products, and your personal experiences with them (your name will be included with your review). Email us at pvcproducts@computer.org.

—Maria Ebling and Mark Corner

DEVICES

HACKED ROOMBA
We’re still too addicted to our iRobot Roomba vacuum cleaner to risk hacking it, but there are some pretty cool hacked Roombas out there. We particularly like the cell-phone-controlled Roomba (documented at http://hackingroomba.com/projects/roombactrl-cell-phone). There’s also now an iRobot Create (see Figure 1), which gives hobbyists the ability to continue to implement their own robotics ideas. Consider it a Roomba, minus the vacuum. The iRobot Create comes in various packages ranging from the bare-bones robot at US$130 to a premium development package running US$300 (www.irobot.com/sp.cfm?pageid=305). The Create comes with 30 built-in sensors and an expansion port that supports adding your own electronics. Also, the dust bin has been turned into a cargo bay with threaded holes for mounting other gizmos.

KEYBOARD BACKLIGHT
The Eee PC has been making a name for itself in the highly portable category (http://eeepc.asus.com/us/product.htm). Its small size makes it highly mobile, so it’s great—even if it’s difficult to see the tiny keyboard in the dark. Or, was difficult, until now. The hackers at Popsci.com added a backlight to the keyboard. It takes just three hours to install and less than a US$15 investment. Sounds great? Well, there are a few caveats. First, you need to be comfortable removing keyboards, snipping wires, and soldering things back together. Second, you need to be happy with adding volume to the sleek 7-inch case; a Techno Flash luminescent wire inverter needs to sit outside the box. Third, you can definitely consider your warranty a thing of the past.

APPLICATIONS

SURROUND VISION
The jDome (www.jdome.com) started as a game enthusiast’s dream of visual immersion in games at an accessible price. jDome is a half-spherical projection screen with a rear projection system that provides gamers with an OmniMax theater-like game experience in their home (see Figure 2). The system assumes that game movement still happens via regular input (that is, by using a mouse) and that the gamer’s visual focus remains straight ahead. These assumptions help keep costs...
down, because only one projector is required. Still, the jDome lets gamers detect movement in their peripheral vision and changes the game experience. It’s available on a limited basis to game developers for a hefty US$6,000 but is expected to be available this year for under US$200, plus the price of a projector.

**WI-FI DETECTOR SHIRT**

You can tell the hackers by the clothes they wear. That is particularly true for this t-shirt. Lazy hackers, not willing to crack open their laptops or pull out their keys, can now see whether there is wireless Internet access nearby by simply looking at their shirt (Figure 3). This battery-powered shirt displays Wi-Fi signal strength for the world to see. It’s machine washable, but you must be comfortable with a small amount of disassembly. The shirt costs US$30 (www.thinkgeek.com/tshirts/illuminated/991e).

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**Tried any new gadgets lately?**

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Figure 2. The jDome. This system provides gamers an Omnimax theater-like gaming experience in the home.

Figure 3. The Wi-Fi detector shirt. It lets the world know there’s wireless Internet access nearby.